

Frequently Asked Questions about Marine Mammal Strandings in the Florida Keys

Why do marine mammals strand?

Marine mammals that are sick, injured, or disorientated may strand on a beach. In the Florida Keys, primarily only whales, dolphins, and manatees are reported stranded. Human-related activities associated with strandings include boat collisions, entanglement in commercial and recreational fishing gear and ingestion of marine debris. One theory regarding mass strandings suggests that the strong social bonds among individuals may cause otherwise healthy animals to follow a sick or disoriented animal inshore. Naturally occurring toxins such as red tide have also been implicated in a large number of strandings. The biological and environmental information collected by scientists from stranded animals is leading to a better understanding of the causes of stranding events.

What should I do if I see a stranded dolphin or whale?

Immediately report both live and dead dolphins or whales by calling 1-800-DIAL-FMP (1-800-342-5367), so that local participants of the National Marine Fisheries Service (NMFS) Stranding Network can be contacted. Stranded manatees should be reported to the U.S. Fish and Wildlife Service. Prompt reporting of strandings is important so that first aid may be quickly administered, the physical condition and health of an animal assessed, and proper treatment given to the animal. **Observe the animal until rescuers arrive, but do not attempt to handle, treat, or return the animal to the sea.** Scientists have discovered that live dolphins and whales that strand by themselves usually have a serious illness or injury. Returning the animals to the sea delays examination and treatment, and often results in the animal stranding again in worse condition. Stranded animals also have the potential for transmitting disease and seriously injuring untrained personnel.

What happens when a stranding is reported?

Every stranding event is unique. There are established protocols so that a coordinated effort can be planned for each situation. Response usually begins when a stranding is reported to the Florida Marine Patrol (FMP). The FMP then contacts the NMFS Stranding Coordinator who immediately dispatches the nearest member of the authorized Stranding Network (who is either an LOA holder and/or designee, see definition below) and coordinates an appropriate response. The role of these first responders is to arrive on the scene quickly, administer first aid, assess the situation, and report information about the species, environmental conditions, and logistical and equipment needs to the NMFS Stranding Coordinator, and LOA holder if appropriate. The first responder serves as the temporary on-site coordinator until the secondary response team arrives. The secondary response team includes either an LOA holder(s) and/or NMFS personnel who arrive with necessary equipment for treatment. The NMFS Stranding Coordinator then draws on the expertise of veterinarians, network coordinators and marine mammal experts to determine the best treatment for the animal's welfare. Animals are evaluated considering many factors including health and injury, the size of the animal, and the availability of and distance to rehabilitation facilities. The coordination, training and experience of the Stranding Network members are invaluable when responding to the challenging conditions that are typically encountered during strandings.

(LOA holder = Letter of Agreement holders and designees are authorized by NMFS to respond to marine mammal strandings.)

Is it safe to transport live stranded marine mammals?

Marine mammals can be comfortably and successfully transported to an authorized rehabilitation facility or to a release location. A veterinarian is consulted to assess the animal's condition and to determine whether the animal is stable enough to endure transport. Certain variables must be taken into account, such as the species (i.e., some species are hardier than others), the condition of the animal and the length of transport. Every effort is made to coordinate the transportation of animals that require medical attention to the nearest available facility.

What is the best environment for rehabilitating a live stranded marine mammal?

The preferred environment for rehabilitating a live stranded animal is in a closed or controlled environment such as a holding pool or a quarantine pool at a marine facility. The rehabilitation requirements of most animals are best met within controlled environments. A fenced natural environment is only beneficial when there are logistical constraints (e.g. a very large animal and inaccessible stranding location), or when the animal is healthy, rehabilitated and being prepared for release back into the wild. Natural rehabilitation environments are problematic for animals in constant need of medical attention for several reasons:

1. **Water quality:** Rehabilitation of stranded animals requires the maintenance of good water quality. The compromised immune system of sick animals may increase the risk of infection to any pathogens naturally occurring in nearshore waters.
2. **Weather conditions:** Animals are vulnerable to severe weather conditions (e.g., hurricanes) in natural rehabilitation environments, placing both the animal and caretakers at risk.
3. **Other marine life:** Many natural rehabilitation environments have live fish, sharks and crabs, which would normally be desirable. However, a marine mammal in critical care may experience various discomforts such as fish biting at its wounds, parasitic infections, etc.
4. **Water depth:** The ability to control water depth reduces the unnecessary stress of capture on animals receiving frequent medical treatment.
5. **Proximity to amenities:** Caretakers need access to facilities that provide electricity, refrigeration of food supplies, and a sanitary laboratory environment.
6. **Species:** Some species are sensitive to environmental stressors and may require a more controlled environment for rehabilitation.

Why aren't all rehabilitated marine mammals released back into the ocean?

The overall goal of the Stranding Network is to do what is best for the animals. For marine mammals requiring rehabilitation, the long-term health and well being of the animal and the risk the animal may pose to the wild population are the most important factors when considering release. Here are some factors that are considered:

1. The medical and behavioral health of the rehabilitated animal: The animal must pass a medical and behavioral screen to ensure that it will have a reasonable chance of survival when released into the wild. Not all marine mammals meet this mark following rehabilitation. Rehabilitated animals should not carry exotic diseases back to the wild population (i.e., diseases not found in the Keys marine environment).
2. The age of the rehabilitated animal: Orphaned calves are not good candidates for release, because they do not acquire the foraging and social skills necessary for survival.
3. The species of marine mammal: For offshore species, there are limitations in locating a local population in which to release the animal. It is important for many dolphin and whale species to belong to social units that cooperatively locate and hunt for food and avoid predators.

Release guidelines developed by experienced biologists and veterinarians are being jointly published by the National Marine Fisheries Service and the Fish and Wildlife Service.

What do we learn from stranded marine mammals?

Stranding events provide a tremendous amount of information to rehabilitation facilities, researchers and resource managers. NMFS facilitates the exchange of information between Stranding Network members to continually improve response and treatment of animals, and to achieve the goal of releasing successfully rehabilitated animals back to the wild. The information collected provides valuable insights into the lives of marine mammals including: seasonal distribution and population numbers, population health, environmental contaminant levels, cases of human interaction, and incidence of disease (e.g. herpes, brucella, and morbillivirus). In some cases, the only existing information about some species has been acquired from stranding events.

How do I volunteer for the Stranding Network?

Anyone can volunteer to assist in the Stranding Network. There are hundreds of volunteers throughout the Keys that play an integral part in rescues and rehabilitations. Individuals can volunteer for local rescue groups that have authorization to respond to stranding events. For more information, contact your local NMFS authorized Stranding Network organizations:

Dolphin Research Center: (305) 289-1121

Florida Keys Marine Mammal Rescue Team: (305) 745-8785

Marine Animal Rescue Society: (305) 919-5503

Dolphins Plus (Marine Mammal Rescue Foundation): (305) 451-1993

Where can I get more information?

Visit the following website:

http://www.nmfs.noaa.gov/prot_res/PR2/Health_and_Stranding_Response_Program/mmhsrp.html

Additional Reading: See publications listed on the above website, as well as:

Geraci, J.R., V.J. Lounsbury. 1998. Field Guide to Marine Mammal Strandings: Texas Sea Grant A&M University Sea Grant College Program, ISBN 1-883550-01-7.

Geraci, J.R., V.J. Lounsbury. Marine Mammals Ashore: A Field Guide to Strandings (CD-ROM)1998. National Aquarium in Baltimore.

St. Aubin, D.J., J.R. Geraci, J.R., V.J. Lounsbury. 1996. Rescue, Rehabilitation, and Release of Marine Mammals: An Analysis of Current Views and Practices. Proceedings of a Workshop held in Des Plaines, Ill, 3-5 December 1991. NOAA Technical Memorandum NMFS-OPR-8.